



Thermowells are precision components manufactured to the highest standard from pipe, tube and bar to serve as protective devices for all types of primary sensing elements which shield the temperature bulbs from the corrosive effects and extreme pressures of the process conditions.

Thermowells also permit the temperature sensor to be removed and replaced without compromising either the ambient region or the process



THERMOWELLS

An enormous variety of thermowell designs are available. Particular conditions of pressure, temperature, velocity and corrosion-resistance govern the size, shape and selection of materials to ensure optimum dependability, response time and accuracy.

Appropriate selection for your process conditions of all the components of the thermowell is therefore critical to performance and operating life.

Below we set out information which should assist you in making your choice. However, if you have any query or special requirement don't hesitate to contact our technical team.



There are two main classes of thermowell design: the fabricated well, which is made from several components welded together, and the machined or solid-drilled thermowell which is milled from solid bar-stock material. The solid-drilled will obviously be more expensive but has more heavy duty application.

Inadequate well strength can be due to a poor choice of wall thickness or material. The bore should be selected to suit the primary sensing element. To ensure optimum response time the amount of free air around the sensor should be minimised whilst at the same time making certain that the thermowell can be easily removed. Minimum wall thickness should be 3mm but must increase with more extreme conditions.

PCi standard thermowells are constructed from 316 stainless steel but where conditions demand 304 and 316 stainless steels, carbon steels, Inconel 600, Monel 400 and PTFE are all available.



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